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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/743,002 11/01/96 DAMSOHN

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QMO2/0327
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WASHINGTON DC 20005

EXAMINER

LEO, L

ART UNIT	PAPER NUMBER
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3743

24

DATE MAILED 03/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/743,002

Applicant(s)

Damsohn et al.

Examiner

Leonard R. Leo

Group Art Unit

3743



☒ Responsive to communication(s) filed on Jan 2, 2001

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 22, 31-35, and 38 is/are pending in the application.

Of the above, claim(s) 32 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 22, 31, 33-35, and 38 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claims 1-20, 23-30, 32 and 36-37 are cancelled, claims 22, 31-35 and 38 are pending, claim 32 remains withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22, 31 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karbach et al in view of Melnyk et al.

Karchach et al discloses all the claimed limitations except latticed tube bottoms.

Melnyk et al discloses a heat exchanger comprising a shell 12 joined to latticed tube bottoms 24 receiving a plurality of tubes 18 for the purpose of providing a fluid tight manifold.

Since Karbach et al and Melnyk et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Melnyk et al would have been recognized in the pertinent art of Karbach et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Karbach et al latticed tube bottoms receiving a plurality of tubes for the purpose of providing a fluid tight manifold as recognized by Melnyk et al. Although

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Melnyk et al discloses the tube bottoms are brazed, one of ordinary skill in the art would employ welding to achieve stronger joints.

Regarding claim 31, Karbach et al discloses the elements are welded (column 5, lines 29-30).

Regarding claim 38, the tube bottoms 24 of Melnyk et al are preformed, since the tubes 18 are inserted therein.

Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karbach et al in view of Melnyk et al as applied to claims 22, 31 and 38 above, and further in view of Kim.

The combined teachings of Karbach et al and Melnyk et al lacks tubes having spacing elements.

Kim discloses a heat exchanger comprising a shell joined to lattice bottoms 2 receiving a plurality of tubes 1; wherein the tubes have spacing elements 3 for the purpose of providing support.

Since Karbach et al and Kim are both from the same field of endeavor and/or analogous art, the purpose disclosed by Kim would have been recognized in the pertinent art of Karbach et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Karbach et al tubes having spacing elements for the purpose of providing support as recognized by Kim.

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Regarding claim 34, it has been held that the term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973).

Response to Arguments

Regarding applicants' remarks with respect to the combination of Karbach et al and Melnyk et al, the tubes 15 of Karbach et al are "rectangular. As shown in Figure 2, the mirror symmetric half shells 13 form a rectangular passage receiving corrugated insert 20.

As disclosed in Karbach et al (column 3, lines 21-23 and column 4, lines 63-64), the projections 21, 22 rest on the surfaces 34 of the tube shells 13 and are therefore, "directly attached."

While Karbach et al discloses the heat exchanger is "hard-soldered", Karbach et al also discloses (column 5, lines 28-29) the device may be welded. Clearly, welding heat exchangers is well known in the art.

Applicants' argument is not commensurate in scope with the claims. The instant invention as claimed is a "method of manufacturing a product," wherein recitations with respect to its intended environment or use does not bear any patentable weight.

Regarding applicants' remarks with respect to Kim and claim 34, it has been held that the term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973).

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Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry of a general nature, relating to the status of this application or clerical nature (i.e. missing or incomplete references, missing or incomplete Office actions or forms) should be directed to the Technology Center 3700 Customer Service whose telephone number is (703) 306-5648.

Any inquiry concerning this Office action should be directed to Leonard R. Leo whose telephone number is (703) 308-2611.



LEONARD R. LEO
PRIMARY EXAMINER
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March 26, 2001